Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A reflective film for adhesion to a construction material, wherein the reflective film comprises a polymer film having a first outer surface and a second outer surface, and a layer of converter grade Aluminum foil having a thickness of between about 0.00025 mil and about 2 mil adhered to ~~one~~ said second outer surface of **[[**a**]]** said polymer film, said polymer film comprising:

   (a) a first outer portion ~~that has an~~ providing said first outer surface of the polymer film, wherein said first outer surface ~~with~~ has a surface energy of at least 35 dynes and ~~that~~ is suitable for adhesion to the construction material, said first outer portion consisting of one or more layers of a first polymer selected from the group consisting of:

      (i) a metallocene-catalyzed polyethylene with density below 0.907 g/cm3 and a melt index between 0.5 and 30 g/10 min;

      (ii) an ethylene vinyl acetate copolymer (EVA) having a vinyl acetate content between 2 and 30% and a melt index between 0.5 and 30 g/10 min;

      (iii) an acid/acrylate or anhydride modified ethylene vinyl acetate copolymer having a melt index between 0.5 and 30 g/10 min;

      (iv) an acid or anhydride modified ethylene acrylate copolymer having a melt index between 0.5 and 30 g/10 min;

      (v) an ethylene butyl-, ethyl- or methyl-acrylate copolymer (EBA, EEA or EMA) having a melt index between 0.5 and 30 g/10 min;

(vi) a terpolymer of ethylene, butyl-acrylate and glycidylmethacrylate (E/nBA/GMA) having a melt index between 0.5 and 30 g/10 min;

(vii) an ethylene acrylic acid and methacrylic acid copolymer having a melt index between 0.5 and 30 g/10 min;

(viii) an ionomer of ethylene, methacrylic acid (E/MAA) having a melt index between 0.5 and 30 g/10 min;

(ix) a maleic anhydride grafted polyethylene or ethylene copolymer having a melt index between 0.5 and 30 g/10 min; and

(x) a combination of one or more of (i), (ii), (iii), (iv), (v), (vi), (vii), (viii), and (ix),

alone or blended with between 0 and 80% low density polyethylene or linear low density polyethylene having a melt index between 0.3 and 30 g/10 min; and

(b) a second outer portion providing said second outer surface of the polymer film adhered to the layer of Aluminum foil and consisting of one or more layers of a second polymer selected from the group consisting of:

(i) an ethylene acrylic acid and methacrylic acid copolymer having a melt index between 0.5 and 30 g/10 min;

(ii) an ionomer of ethylene, methacrylic acid (E/MAA) having a melt index between 0.5 and 30 g/10 min;

(iii) a maleic anhydride grafted polyethylene or ethylene copolymer having a melt index between 0.5 and 30 g/10 min;

(iv) a low density polyethylene having a melt index between 0.3 and 30 g/10 min; and

(v) a combination of one or more of (i), (ii), (iii) and (iv).

2. (currently amended) A reflective film for adhesion to a construction material, wherein the reflective film comprises a polymer film having a first outer surface and a second outer surface, and layer of converter grade Aluminum foil having a thickness of between about 0.00025 mil and about 2 mil adhered to ~~one~~ said second outer surface of **[[**a**]]** said polymer film, said polymer film comprising:

(a) a first outer portion ~~that has an~~ providing said first outer surface of the polymer film, wherein said first outer surface ~~with~~ has a surface energy of at least 35 dynes and ~~that~~ is suitable for adhesion to the construction material, said first outer portion consisting of one or more layers of linear low density polyethylene having a melt index between 0.3 and 30 g/10 min alone or blended with between 0 and 80% low density polyethylene; and

(b) a second outer portion providing said second outer surface of the polymer film adhered to the layer of Aluminum foil and consisting of one or more layers of a second polymer selected from the group consisting of:

(i) an ethylene acrylic acid and methacrylic acid copolymer having a melt index between 0.5 and 30 g/10 min;

(ii) an ionomer of ethylene, methacrylic acid (E/MAA) having a melt index between 0.5 and 30 g/10 min;

(iii) a maleic anhydride grafted polyethylene or ethylene copolymer having a melt index between 0.5 and 30 g/10 min;

(iv) a low density polyethylene having a melt index between 0.3 and 30 g/10 min; and

(v) a combination of one or more of (i), (ii), (iii) and (iv).

3. (previously presented) The reflective film according to claim 1, wherein the polymer film additionally includes a middle portion consisting of one or more layers of a third polymer selected from the group consisting of:

(i) a low density polyethylene with a melt index between 0.3 and 30 g/10min;

(ii) a linear low density polyethylene with a density below 0.930 g/cm^3 and melt index between 0.3 and 30 g/10min;

(iii) a polyethylene with a density above 0.930 g/cm^3 and melt index between 0.3 and 30 g/10min;

(iv) an ethylene vinyl acetate copolymer having a vinyl acetate content between 2 and 30 % and a melt index between 0.5 and 30 g/10min;

(v) a polypropylene; and

(vi) any combination of two or more of (i), (ii), (iii), (iv) and (v).

4. (original) The reflective film according to claim 3, wherein the middle layer is formulated to provide heat resistance.

5. (original) The reflective film according to claim 4, wherein the middle layer additionally comprises high density polyethylene or polypropylene resin.

6. (previously presented) The reflective film according to claim 1, which comprises a polymer film composite that additionally includes a middle portion consisting of one or more layers of kraft paper.

7. (previously presented) The reflective film according to claim 1, wherein one or more layers of the polymer film additionally comprises a slip agent or an anti-block agent.

8. (previously presented) The reflective film according to claim 1, wherein both of the outer surfaces of the polymer film are corona, ozone or flame treated in order to obtain the surface energy of at least 35 dynes.

9. (previously presented) The reflective film according to claim 1, wherein the layer of Aluminum foil is adhered to the polymer film via extrusion laminating of the film to the foil.

10. (previously presented) The reflective film according to claim 1, wherein the layer of Aluminum foil is adhered to the polymer film using a heat and pressure laminator and a method comprising annealing, heating and pressing the film onto the foil and cooling the resultant reflective film.

11. (previously presented) The reflective film according to claim 1, wherein the layer of Aluminum foil is adhered to the polymer film using a solvent or solvent-free lamination system using an adhesive.

12. (previously presented) The reflective film according to claim 1, wherein the layer of Aluminum foil is adhered to the polymer film using a thermal, UV or E-beam curable adhesive and/or an epoxy- or polyurethane-based adhesive.

13. (previously presented) The reflective film according to claim 1, wherein the layer of Aluminum foil is sprayed with a light coating of primer and cured before being adhered to the polymer film.

14. (previously presented) The reflective film according to claim 1, wherein the layer of Aluminum foil has a plurality of perforations therethrough.

15. (previously presented) A composite material comprising the reflective film according to claim 1 laminated to one side of a construction material, wherein the polymer film is directly adhered to the construction material such that the layer of Aluminum foil forms a surface of the composite material.

16. (original) The composite material according to claim 15, wherein the construction material is an oriented strand board, a lumber based product, a fibreboard or a structural or non-structural plastic.

17. (previously presented) The composite material according to claim 15, wherein the reflective film is thermo-laminated to the construction material using heat and pressure.

18. (previously presented) A method of manufacturing a composite material comprising the step of thermo-laminating the reflective film according to claim 1 to one side of a construction material such that the layer of Aluminum foil forms a surface of the composite material.

19. (original) The method according to claim 18, wherein the construction material is an oriented strand board, a lumber based product, a fibreboard or a structural or non-structural plastic.